SPEAKER BIOGRAPHIES (IN ORDER OF APPEARANCE)

PATRICK DAVIS

Program Manager, Vehicle Technologies Program US Department of Energy

Patrick Davis is the Program Manager of the Vehicle Technologies Program Office at the U. S. Department of Energy. The Vehicle Technologies Program supports over \$310 million in annual research funding for hybrid drivetrains, advanced batteries, lightweight materials, advanced combustion and fuels, vehicle systems integration, and deployment activities, as well as codes and standards activities spanning the vehicle technologies area. He is responsible for two major government industry partnerships, the FreedomCAR and Fuel Partnership and the 21st Century Truck Partnership, as well as \$2.8 billion in vehicle related Recovery Act projects. Mr. Davis also serves on the Board of Directors of the American National Standards Institute.

Mr. Davis graduated with a Bachelor's degree in Chemical Engineering from the University of Maryland and has over 27 years of experience in the development of vehicle, alternative fuel, and electrochemical technologies.

DAVID SANDALOW

Assistant Secretary for Policy and International Affairs US Department of Energy

Prior to his current position, David Sandalow was most recently an Energy & Environment Scholar and a senior fellow in the Foreign Policy Studies Program of the Brookings Institution. He also served as the Energy and Climate Change Working Group Chair of the Clinton Global Initiative. Mr. Sandalow is the editor of *Plug-In Electric Vehicles: What Role for Washington*? (Brookings Press, 2009), author of *Freedom from Oil* (McGraw-Hill, 2008), and frequent commentator on energy and environmental policy. Previously, Mr. Sandalow served as Assistant Secretary of State for Oceans, Environment and Science; Senior Director for Environmental Affairs, National Security Council; Associate Director for the Global Environment, White House Council on Environmental Quality, and Executive Vice President, World Wildlife Fund-US. Mr. Sandalow is a graduate of Yale College (BA Philosophy) and the University of Michigan Law School (JD).

RICK WALLACE

Senior Policy Analyst

Oregon Department of Energy, Energy Policy Development Division

Rick Wallace is a Senior Policy Analyst at the Oregon Department of Energy in the Energy Policy Development Division. He serves as the agency expert on alternative fuels, infrastructure, and vehicles in the transportation sector. Rick also serves as a board member of the Columbia Willamette Clean Cities Coalition. Previous to his work at ODOE, he worked with a contractor to the U.S. DOE and EPA's EnergyStar program. He was also the project manager for the San Diego Gas & Electric In-Store Demonstration and the Residential EnergyStar Windows programs. Rick has accumulated eleven years experience developing, marketing and administrating conservation and renewable fuel programs. Prior to this, Rick worked 14 years in the aerospace defense industry as an engineer.

DONALD B. KARNER

President, Co-Founder and Chief Executive Officer ECOtality North America

Donald Karner has over 35 years experience in the areas of advanced transportation and energy, including fifteen years of electric utility industry management experience, where he held the position of Chief Nuclear Officer for Arizona Public Service Company during the construction and commissioning of the 3800 MWe Palo Verde Nuclear Generating Station. During this period Mr. Karner directed a staff of 3,000 and interfaced with and provided testimony for multiple plant owners, the NRC, various State regulatory commissions, and the financial community regarding plant matters.

Since 1989, Mr. Karner has managed businesses in advanced transportation markets. Currently, he serves as President of ECOtality North America, where he provides strategic direction, conducts research, and oversees the development of products and services in the areas of energy, environment, and advanced transportation infrastructure. Mr. Karner has authored numerous papers on these topics, and ECOtality North America offers a number of products associated with these technology areas including battery fast chargers, battery testing, electric vehicle fueling infrastructure and hydrogen fueling infrastructure. He currently is Program Manager for the EV Project, a public-private partnership between Ecotality and the Department of Energy to deploy and study plug-in electric vehicle charge infrastructure in cities across the US.

Mr. Karner holds a B.S. in Electrical Engineering and an M.S. in Nuclear Engineering.

COLLEEN CROWNINSHIELD

Manager

Tucson Regional Clean Cities Coalition

Colleen Crowninshield has worked for the Pima Association of Governments (PAG) since 1994, and in 2002, assumed the position of Clean Cities Coordinator. In 2004, she began managing the Tucson Regional Clean Cities Coalition. In 2005, the U.S. Department of Energy awarded her the Clean Cities Coordinator of the Year Award. Also in 2005, the Tucson Mayor and City Council awarded her the Copper Letter Award as an Extraordinary Citizen. Currently, Ms. Crowinshield is the clean-fuels advisor for the Ambos Nogales Air Quality Task Force under EPA's Border 2012 Initiative.

The Tucson Coalition's most recent projects include:

- Provided consultation to the National Football League's Environment Program about alternative fuel choices at the 2008 Super Bowl in Tempe, Arizona.
- Began the second clean-fuel driver training program in the nation at a local high school using two
 compressed natural gas Honda Civics in a curriculum that teaches young drivers about alternative
 fuels.
- Received the 2003 Governor's Pride in Arizona Award for Pollution Prevention as well as the 2004 EPA Region 9 Environmental Award.

SUSAN FREEDMAN

Senior Regional Energy Planner San Diego Association of Governments (SANDAG)

Susan Freedman manages SANDAG's energy and climate planning program, which encompasses long-term regional energy planning to reduce petroleum use, inefficient electricity use, and greenhouse gas emissions. Ms. Freedman is a member of the EV Project Stakeholder Advisory Group and sits on the Board of the San Diego Regional Clean Cities Coalition. She also provides staff support to the SANDAG Regional Energy Working Group.

Ms. Freedman has overseen a number of significant projects in the EV realm: a multi-year partnership with the California Energy Commission, the update to SANDAG's *Regional Energy Strategy*, and the development of a *Regional Alternative Fuels*, *Vehicles and Infrastructure Report*. She is heading a three-year utility partnership to develop energy management plans for local governments.

Prior to joining SANDAG, Ms. Freedman led policy and planning activities for the San Diego Regional Energy Office (now the California Center for Sustainable Energy). Before moving to San Diego, she spent six years in Washington, DC, where she dealt with federal and multi-state energy and clean air policies at the Northeast-Midwest Institute and the Alliance to Save Energy. She holds a BA in Political Science/Ecology from Emory University and an MA in Energy/Environmental Policy from the College of Urban Affairs and Public Policy at the University of Delaware.

PAUL J. MITCHELL

President and CEO Energy Systems Network

Paul Mitchell is President and CEO of Energy Systems Network (ESN), a consortium of companies and institutions focused on the development of Indiana's energy technology "cleantech" sector. ESN provides project development and coordination for joint ventures and cooperative partnerships between network members who are seeking to commercialize new energy technologies. These technologies include a diversity of cleantech markets, such as advanced technology vehicles, distributed power generation, advanced biofuels, renewable energy, and energy efficiency.

Prior to joining ESN, Mr. Mitchell served in the Office of Governor Mitch Daniels where he was Policy Director for Economic Development, Workforce, & Energy. In this capacity he oversaw legislation, policy, and program development for the Indiana Economic Development Corporation, Indiana Department of Workforce Development, and Indiana Department of Labor. He also acted as the Governor's liaison to the Indiana Utility Regulatory Commission and the Office of Utility Consumer Counselor. During his tenure with the Governor's Office, Mr. Mitchell led the formation of and directed the Indiana Office of Federal Grants and Procurement.

A native of West Lafayette, Indiana, he holds a Bachelors of Science and a Masters of Public Affairs from the Indiana University School of Public and Environmental Affairs in Bloomington, where he graduated as valedictorian.

LAURA SPANJIAN

Sustainability Director for Mayor Annise Parker City of Houston

In April 2010, Laura Spanjian joined the City of Houston as Mayor Annise Parker's Sustainability Director. She is responsible for directing and coordinating projects and initiatives that improve air, land and water quality. She works to support and expand renewable energy, energy efficiency, green buildings, recycling and composting, alternative and clean transportation, local food production and more livable and vibrant neighborhoods. Her career includes roles as Assistant General Manager—External Affairs at the San Francisco Public Utilities Commission (SFPUC), where she managed four divisions, including sustainability planning and legislative affairs and Government Affairs Director at the San Francisco Municipal Transportation Agency (MTA) Muni. Her accomplishments include directing the creation of MTA Muni's Alternative Fuel Vehicle Program, which led to San Francisco to having the nation's 3rd-largest hybrid bus fleet. She has also directed the passage of numerous state legislative bills, including the expansion of indoor and outdoor graywater use, and led the passage of federal appropriation funding for numerous initiatives, including \$1M for a grease-to-biofuel plant.

FRED HANSEN

Program Manager in Strategies and Metrics Division Energetics

Dr. Hansen is a Program Manager in Energetics' Strategies and Metrics Division. He provides strategic planning and technology roadmapping services to a variety of public-sector clients, including the Department of Homeland Security (DHS), Department of Energy (DOE), and the National Institute of Science and Technology (NIST). His private-sector clients also include the American Chemistry Council, the American Forest and Paper Association, and the Propane Education and Research Council (PERC). Dr. Hansen is an experienced facilitator and has facilitated variety of events, including planning and visioning meetings, roundtable discussions, tabletop exercises, and team building sessions. He has experience working with diverse populations ranging from academicians, research scientists, and engineering professionals addressing highly technical topics to owners, managers, and sales professionals addressing strategic business issues. Dr. Hansen holds a Ph.D. in Management and Organization Science and has over 20 years of professional experience. He is an expert in strategic planning and has authored numerous journal articles on business strategy and twice contributed to the annual Handbook of Business Strategy. Dr Hansen also has specialized expertise in psychometrics, statistical analysis, and program evaluation.

MATT ROGERS

Senior Advisor to the Secretary of Energy for the Recovery Act US Department of Energy

Matt Rogers supervises the Department of Energy's \$36.7 Billion in Recovery Act appropriations. These funds support about \$100 Billion in projects in energy efficiency, renewable energy, energy infrastructure, carbon capture, basic energy science, and environmental clean up. Previously, Mr. Rogers was a Senior Partner in McKinsey & Company's San Francisco Office. With McKinsey, he led their American Petroleum Practice and their North American Electric Power and Natural Gas practice.

He also helped establish their Clean Technology practice. He has spent more than 20 years consulting with leading oil companies and utilities globally.

Mr. Rogers played a leading role in developing McKinsey's perspectives on global energy supply/demand and greenhouse gas abatement economics. He also served the Obama Presidential Transition Team in a special effort to develop opportunities to reduce the cost and increase renewable content in federal energy procurement.

Mr. Rogers graduated magna cum laude from Princeton University. After graduation, he joined Credit Suisse First Boston as an energy investment banking analyst. He earned an M.B.A. from Yale University's School of Management.

NANCY GIOIA

Director of Global Electrification Ford Motor Company

Nancy Lee Gioia is Ford Motor Company's director of Global Electrification. Appointed to this position on Oct. 9, 2009, Ms. Gioia directs strategy and planning for the next generation of Ford's global electric vehicle portfolio. She touches on all aspects of electrified transportation, including product planning, supplier partnerships, and collaboration with the energy industry and government. Prior to taking her current role, Ms. Gioia was Ford's director of Sustainable Mobility Technology and Hybrid Vehicle Programs for North America. In this role, she oversaw research, development and deployment of other sustainable mobility technologies such as hydrogen internal combustion engines and hydrogen fuel cell vehicles.

Earlier in her career at Ford, Ms. Gioia was director of Current Model Vehicle Quality for North America, where she was responsible for overall current model quality performance. Ms. Gioia has held several key management and executive positions within Ford Product Development, including valuable experience in electronics architecture design and integration in vehicles. She also was chief engineer for the Ford Aeromax class-8 truck line and the 2002 Ford Thunderbird program. She went on to direct engineering for all Ford, Lincoln, and Mercury passenger cars in North America before taking on her current assignment.

Ms. Gioia received her bachelor's degree in Electrical Engineering from the University of Michigan and her master of sciences in Manufacturing Systems Engineering from Stanford University. While studying with the assistance of a Ford Advanced Education Fellowship, she received the Outstanding Service Award from the Stanford Institute for Manufacturing and Automation. In July 2001, she received the All Star Award from Automotive News and in 2005 she was named as one of the Automotive News "100 Leading Women in the Auto Industry."

DOUGLAS GREENHAUS

Director of Environment, Health & Safety in NADA's Legal and Regulatory Affairs Group National Automotive Dealers Association

Representing automotive dealer interests, Mr. Greenhaus routinely speaks before such federal agencies as the Environmental Protection Agency, the Department of Transportation, and the Department of Labor. Additionally, he advises and counsels association members and staff on federal regulatory matters, has authored numerous trade publication articles and association educational guides, and speaks frequently at industry engagements. Before joining NADA, Mr. Greenhaus worked as an associate counsel for the Massachusetts Energy Facilities Sitting Counsel and later as a staff attorney for the EPA in Washington, D.C. He holds a B.A. in political science and environmental studies from the University of Vermont and a J.D. from the National Law Center, George Washington University. He is a member of the Massachusetts, District of Columbia, and Virginia Bars.

BRITTA K. GROSS

Director, Global Energy Systems and Infrastructure Commercialization General Motors

Britta Gross is responsible for assessing energy system alternatives, identifying energy strategies and business opportunities, and steering the commercialization efforts for electrical and hydrogen infrastructure. This infrastructure is required to support the deployment of GM's rapidly developing electric propulsion vehicle technologies, based on fuel cells and plug-in batteries.

Ms. Gross has an extensive and diverse background in the Automotive and Aerospace industries. She began her career in 1983 with Hughes Space & Communications in Los Angeles, leading Mission Design and Systems Engineering teams developing satellite programs. In 1995, she transferred to Opel in Russelsheim, Germany where she led a joint aerospace/automotive project that involved Hughes, GM, and Opel vehicle design engineers. After seven years in Europe, Gross returned to the U.S. and joined General Motors' Advanced Vehicle Technology programs to work on the Hydrogen Fuel Cell Vehicle program.

Ms. Gross received a degree in Electrical Engineering from Louisiana State University in Baton Rouge, Louisiana and studied language arts at the University of Wurzburg in Germany. She serves on the Board of Directors of the National Hydrogen Association.

TRACY L. WOODARD

Director of Government Affairs Nissan

Tracy Woodard is the Director of Government Affairs for Nissan's North American Operations. She is responsible for all federal and state government activities in the United States, including monitoring federal and state legislative and regulatory issues. Ms. Woodard is the head of the Washington, DC government affairs office, where she spends a great deal of her time. She also manages contract lobbyists who represent Nissan. For the last two years, she has been helping lead Nissan's holistic approach to introducingthe Nissan LEAF. Ms. Woodard is responsible for local, regional, and state

government interaction as well as with other stakeholders such as utilities, major employers, universities, etc.

Ms. Woodard came to Nissan from the Nashville-based firm of Smith, Johnson & Carr, where she worked as a lobbyist for seven years. Previously, she had served as a legislative assistant for the Tennessee General Assembly and as a research aide for the Energy Environment and Research Center in Knoxville.

She has a Bachelor of Arts degree in political science from the University of Tennessee. A native of Jefferson City, Tennessee, Ms. Woodward now lives in Nashville, and her office is located at Nissan's North American headquarters.

RICHARD LOWENTHAL

Founder and CEO Coulomb Technologies

Richard Lowenthal is the CEO of Coulomb Technologies, which he co-founded in 2007. From 1998 until 2007, he was instrumental in starting several companies, including Lightera, Pipal Systems and Procket Networks. From 1996 to 1997, Mr. Lowenthal was vice president and general manager of Cisco's WAN Access Products Division. From 1990 through 1995, Mr. Lowenthal was vice president of research and development for StrataCom, a telecommunications equipment company. Prior to StrataCom, Mr. Lowenthal was co-founder and vice president of engineering for Stardent Computers, and vice president of engineering for Convergent Technologies.

Mr. Lowenthal is also a former Mayor of Cupertino, California, and has been heavily involved in the non-profit world. He has a Bachelors of Science degree in Electrical Engineering from UC Berkeley.

LARRY ALFORD

Manager, Distributed Generation with the Strategic Planning & Business Development Austin Energy

Larry Alford is the Manager of Distributed Generation with the Strategic Planning & Business Development Department at Austin Energy. His responsibilities include testing and developing distributed energy resources as they fit with the Austin Energy portfolio of assets and services. Mr. Alford is currently leading the effort to prepare for and integrate Plug-In Electric Vehicles into the Austin Energy system. Previously, Mr. Alford had developed several on-site energy projects for Austin Energy, including the Mueller Energy Center at the Dell Children's Medical Center (the nation's first LEED Platinum hospital), the Domain chiller plant, and the RBJ Health Center fuel cell demonstration project.

Mr. Alford has over 38 years experience in the electric utility business. Prior to joining Austin Energy in 2001, he worked for Central Power & Light Company (now a part of American Electric Power). Mr. Alford attended Texas A&M University-Kingsville.

MIKE ROWAND

Director of Technology Strategy Duke Energy

Mike Rowand is responsible for monitoring, evaluating, and developing adoption strategies for emerging technologies. In this role, Mr. Rowand is responsible for Duke's strategy and planning for electric transportation. He leads research to determine the impacts of plug-in vehicles and energy storage on Duke's infrastructure and business processes, as well as the integration of these technologies with Duke's Smart Grid initiatives.

Mr. Rowand has been with Duke Energy for 25 years and has experience in various aspects of the utility industry, including Transmission and Distribution Engineering, Customer Service, Rates and Regulatory processes, and Marketing. He is a graduate of the University of Florida with a degree in Mechanical Engineering. He is also a licensed Professional Engineer in NC and SC and a Certified Energy Manager.

ROBERT L. GRAHAM

Manager, External Engagement, PEV Readiness Southern California Edison

Robert Graham specializes in alternate fuel vehicle transportation applications and directs the Electric Transportation Program at the Electric Power Research Institute. He also developed the Advanced Technology Transit Bus program that was financed by the Federal Transit Administration and the Los Angeles Metropolitan Transportation Authority.

Mr. Graham received the Electric Power Research Institute's distinguished Chauncey Award for establishing the Plug-in Hybrid Vehicle program at the Institute in 2000. He is also the Manager of External Engagement with Southern California Edison's Plug-in Vehicle (PEV) Readiness team. He is responsible for Federal and State PEV policy activities while also in charge of outreach to communities, PEV manufacturers, and PEV infrastructure providers.

JAMES ELLIS

Senior Manager for Transportation and Infrastructure
Tennessee Valley Authority - Environment and Technology Innovation

James Ellis is the Senior Manager for Transportation and Infrastructure in the Environment and Technology Innovation organization of the Tennessee Valley Authority (TVA). Mr. Ellis works with regional distributors of TVA power, major automotive manufacturers, Federal and State agencies, technology developers, communities and industry professionals to enable sustainable transportation in the Tennessee Valley.

Mr. Ellis earned a Bachelor of Science (BS) degree in Industry Studies from Appalachian State University in Boone, North Carolina and a Masters of Business Administration (MBA) from Belmont University's Massey School of Business in Nashville, Tennessee. He joined TVA's Economic Development organization in 2005, managing the Valley Advantage and the Appalachian Regional Commission programs, participating in TVA's Economic Development Loan Team and supporting new and existing industry including a growing automotive presence in the TVA region. Mr. Ellis was selected to lead the

newly-formed Electric Transportation group in 2008, and since that time, he has continued assessing the energy, environmental and economic implications of the transition from petroleum to electricity as a transportation fuel. Mr. Ellis is successful in organizing and developing regional partnerships to promote technology innovation through research and development demonstrations via investments from public and private entities.

Mr. Ellis, his wife Susan and his three children live in Nashville, Tennessee.

DR. DONALD G. HILLEBRAND

Director of Transportation Research Argonne National Laboratory

Don Hillebrand is the Director of Argonne's Center for Transportation Research. In this role, he is responsible for leading a team of engineers and physicists who are actively seeking to solve transportation problems related to the nation's reliance on imported energy.

Dr. Hillebrand came to Argonne from DaimlerChrysler A.G. in Stuttgart, Germany where he worked as the manager of Research and Technology Policy in the DaimlerChrysler research labs. Previously, he worked two years in the White House Office of Science and Technology Policy as a Senior Policy Advisor for Transportation to the Executive Office of the President.

Dr. Hillebrand was elected a member of the Board of Directors of the Society of Automotive Engineers; he is also a Fellow of ESD, the Engineering Society of Detroit.